

WHAT IS CLAIMED IS:

1. A wide area network for bi-directional transmission between a plurality of user nodes and a central source node, at least some of the user nodes comprising rooftop video broadcast receiving installations modified with a terrestrial bi-directional antenna and network transmission support electronics.
2. The wide area network of claim 1, wherein at least some of said user nodes comprise support for hotspot functionality, thereby to allow mobile communication devices to access said wide area network system.
3. The wide area network of claim 2, wherein said support for hotspot functionality substantially comprises standard IEEE 802.11.
4. The wide area network of claim 1, wherein said rooftop video broadcast receiving installations are satellite receiving installations.
5. The wide area network of claim 1, wherein said rooftop video broadcast receiving installations are terrestrial broadcast receiving installations.
6. A wide area network system, comprising:
 - a central source node,
 - a plurality of base nodes connected via cable infrastructure to said central node, and
 - a plurality of user nodes, at least some of the user nodes comprising rooftop video broadcast receiving installations modified with a terrestrial bi-directional antenna and network transmission support electronics.
7. The wide area network system of claim 6, wherein the cable infrastructure is hybrid fiber coax (HFC) infrastructure.
8. The wide area network system of claim 6, wherein a wide area network transmission standard is used over said cable infrastructure.

9. The wide area network system of claim 8; where said transmission standard is at least one of IEEE 802.16 standard or the IEEE 802.20 standard.

10. The wide area network system of claim 6, wherein at least some of said user nodes comprise support for hotspot functionality, thereby to allow mobile communication devices to access said wide area network system.

11. The wide area network system of claim 10, wherein said support for hotspot functionality substantially conforms to IEEE standard 802.11.

12. The wide area network system of claim 6, wherein said rooftop video broadcast receiving installations are satellite receiving installations.

13. The wide area network system of claim 6, wherein said rooftop video broadcast receiving installations are terrestrial broadcast receiving installations.

14. A hybrid cable and wireless bidirectional transmission network comprising a wireless network part and a cable part and wherein a wide area network transmission standard is used over both said wireless network part and said cable part.

15. The hybrid cable and wireless bidirectional transmission network of claim 14, wherein said transmission standard is at least one of IEEE 802.16 standard or the IEEE 802.20 standard.